

Patent Abstracts of Japan

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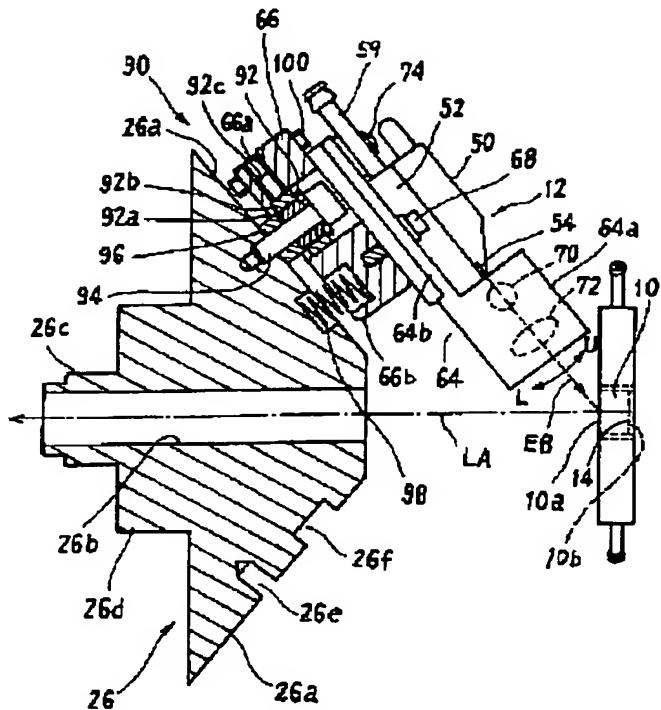
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APPLICANT : MIYACHI TECHNOS CORP;

INVENTOR : NAKAYAMA SHINICHI;

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TITLE : EDGE STIMULATION SOLID-STATE
 LASER DEVICE



ABSTRACT : PROBLEM TO BE SOLVED: To facilitate the adjustment of a highly efficient edge stimulation of a solid-state laser which is smaller in size than side stimulation.

SOLUTION: A plurality of stimulation laser units 12 are arranged around the optical axis of a laser beam LA. A stimulation laser beam EB places its focal point in the vicinity of the center of the edge face 10a of a solid-state laser medium 10, and the spot, position and size of the focal point are adjusted by a stimulation laser beam optical axis adjusting mechanism 90. The placing stand 66 of the stimulation laser is attached to the outer circumferential surface 26a of a conical unit supporting member 26 through two adjusting screw 100 and a spherical surface slide bearing 92. When the two adjusting screws are adjusted, the placing stand 66 can be rotated in the arbitrary direction along the spherical surface of the spherical surface slide bearing 92 in cooperation with a compression coil spring 98. Accordingly, as the spot of the stimulation laser beam EB can be controlled freely in the vicinity of the center of the edge face 10a of the solid-state laser medium, the solid-state laser can easily be stimulated efficiently by equally controlling a plurality of stimulation laser beams.

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